AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-32. (canceled)

33. (new) A method, wherein a target nucleic acid sequence comprising the following steps:

a) immobilizing an oligonucleotide probe to a solid support via a solid phase anchor, said immobilized probe comprising at least one 3'-end sequence, an intermediate sequence comprising a solid phase anchor, and at least one 5'-end sequence, wherein the 3'-end sequence or 5'-end sequence further comprises at least one detectable function and a cleavable site between the detectable function and the solid phase anchor,

b) contacting the immobilized probe with a target nucleic acid sequence allowing the 3'-end and the 5'end of said immobilized probe to hybridize to at least substantially neighbouring regions of said target nucleic acid sequence conditions;

c) covalently linking the ends of the oligonucleotide probe to each other to form a circularized structure;

d) cleaving the oligonucleotide probe between the detectable function and the solid phase anchor;

e) separating non-connected detectable functions from the solid support by washing under denaturing conditions;

f) detecting the presence, and optionally, quantity and/or location of the remaining detectable function.

34. (new) The method according to claim 33, wherein one or both of the probe ends have at least two branches, and a detectable function is provided on each of the branches on one end part of said probe, the detectable functions being different and distinguishable from each other.

35. (new) The method according to claim 34, wherein one probe end is linear and the other probe end is branched.

36. (new) The method according to claim 33, wherein said detectable function is dissociable by being provided on a circular probe hybridizing to said target-specific probe.

37. (new) The method according to claim 33, wherein said detectable function is dissociable by being provided on said target-specific probe hybridizing to a circular probe.

38. (new) The method according to claim 33, wherein said target-specific probe is designed to hybridize to the target nucleic acid sequence to leave an interspace between the probe ends, at least one additional probe is provided which is designed to hybridize to the target nucleic acid sequence in said interspace, and the hybridized probes are covalently interconnected.

39. (new) The method according to claim 33, wherein said target-specific probe or probes are designed to hybridize to the target nucleic acid sequence to leave a small gap between adjacent probe ends, and said gap or gaps are filled by an extension reaction prior to covalently interconnecting the probe ends.

40. (new) The method according to claim 33, wherein said covalent connection of the probe ends is performed by enzymatic, ribozyme-mediated or chemical ligation.

41. (new) The method according to claim 33, wherein said target nucleic acid is a DNA or RNA sequence.

42. (new) The method according to claim 33, wherein said oligonucleotide probe or probes are immobilized via biotin to a streptavidin-coated solid phase.